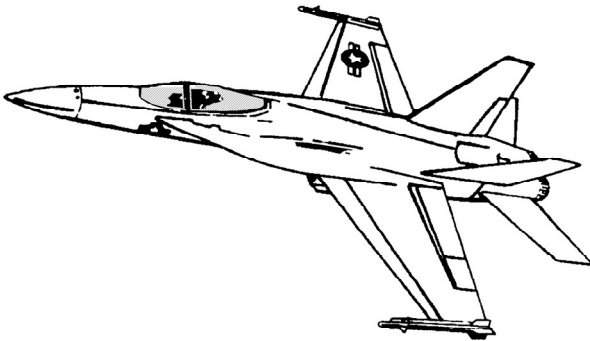


A1-F18AC-LWS-200

Conventional Weapons

CHECKLIST F/A-18A/B RELEASE & CONTROL BASIC



THIS PUBLICATION SUPERSEDES
A1-F18AC-LWS-200 DTD 1 JUNE 1997
AND ALL CHANGES THERETO

DISTRIBUTION STATEMENT C: Distribution authorized to U.S. Government agencies and their contractors to protect publications required for official use or for administrative or operational purposes only, determined on 1 October 2002. Other requests for this document shall be referred to Commanding Officer, Naval Air Technical Data and Engineering Service Command, Naval Air Station North Island, P.O. Box 357031, Building 90 Distribution, San Diego, CA 92135-7031.

DESTRUCTION NOTICE: For unclassified, limited documents, destroy by any method that will prevent disclosure of contents or reconstruction of the document.

PUBLISHED BY DIRECTION OF THE
COMMANDER, NAVAL AIR SYSTEMS COMMAND

0801LP1016928

1 OCT 2002

NATEC ELECTRONIC MANUAL

CHANGES INCORPORATED

Insert latest change pages; destroy superseded pages in accordance with applicable regulations.

Dates of issue for original and change pages are:

Basic0 (IRACs 1 & 2 Incorporated)1 Oct 2002

Total number of pages in this checklist is 82, consisting of the following:

<u>Pg. No.</u>	<u>Chg. No.</u>	<u>Pg. No.</u>	<u>Chg. No.</u>	<u>Pg. No.</u>	<u>Chg. No.</u>
Title	0	i - iii	0	1 - 75.....	0
A.....	0	iv Blank	0	76 Blank.....	0

ADDITIONAL COPIES OF THIS PUBLICATION MAY BE OBTAINED AS FOLLOWS:

Procedures to be used by Naval activities and other Department of Defense organizations requiring NAVAIR technical publications are defined in the NAVAL AIR SYSTEMS COMMAND TECHNICAL MANUAL PROGRAM manual, NAVAIR 00-25-100 and Distribution of Aeronautical Technical Publications Instruction, NAVAIRINST 5605.4 series.

When an activity has a continuing requirement for automatic distribution of technical publications, the Automatic Distribution Requirement Listing (ADRL) shall be used. For complete information on distribution refer to NAVAIR 00-25-100.

TABLE OF CONTENTS

<u>TITLE</u>	<u>PAGE</u>
Changes Incorporated	A
Table of Contents	i
Introduction	i
Required Reading	i
Aircraft Preparation	1
Jettison System	3
Parent Rack Release System	14
VER Release System	19
VER Rocket Firing System	27
MER/BRU-41/BRU-42 Release System	33
BRU-42 TALD Release System	42
Fuze Function Control System	50
M61 Gun Firing	58
ALE-39 Dispenser System	68
Postcheck	75

INTRODUCTION

This checklist contains abbreviated procedures extracted from the Airborne Weapons/Stores Loading Manual, A1-F18AE-LWS-000.

This checklist contains procedures necessary to perform Release and Control Checks and provide a basis for determining a safe and reliable aircraft armament system.

This checklist is presented under the assumption that the aircraft armament system and associated equipment are ready to be checked.

REQUIRED READING

Checks may be performed with airborne stores (fuel tanks, ECM pod, empty VER, etc.) installed on the aircraft stations provided breech caps are disconnected and cartridges are removed. Appropriate Release and Control Check sections required for loading should be performed prior to loading.

REQUIRED READING (Continued)

Anytime a malfunction occurs, stop the check and report the discrepancy to proper authority. After the malfunction has been corrected the check must be repeated in its entirety.

Release and Control team members must perform all tabularized steps within the tables of this checklist in sequence and no steps may be omitted except as noted herein. Team members may perform several steps simultaneously, provided they do not invalidate or interfere with a preceding or subsequent step and safety precautions are strictly observed. Sequential steps to be completed before or after performance of a table may be performed simultaneously when knowledge and understanding clearly dictate that safety will not be compromised.

Performance of this checklist may require additional actions that do not affect safety or reliability and are not specifically addressed. The team leader shall be qualified on the F/A-18A/B aircraft and is the approving authority for such actions.

Ensure compliance/incorporation of the following Technical Directives, as applicable:

1. None.

PRELOADING CHECKS:Weapon/StoreCheck Section

Bombs

Jettison System; Parent Rack Release System or VER Release System; Fuze Functional Control System (if electrical fuzing is used).

Practice Bombs,
LUU-2 Flare

Jettison System; MER/BRU-41/BRU-42 Release System.

TALD

BRU-42 TALD Release System.

Rockets

Jettison System; VER Rocket Firing System.

REQUIRED READING (Continued)

Fuel Tanks	Jettison System.
M61 Gun	M61 Gun Firing System.
ALE-39	ALE-39 Dispenser System.

RESTRICTIONS:

1. Release and Control Checks will NOT be performed with weapons loaded on the aircraft. Checks may be performed with live ammunition in the M61 drum unit assembly provided gun chambers are clear, gun electrical safety switch is extended, the manual clearing handle is in the clear position, and the electrical interface connector is disconnected and stowed.
2. These procedures are validated/verified only for software releases 92A and 10A.

TEST EQUIPMENT/SPECIAL TOOLS:

1. Multimeter
2. AN/AWM-54 or AN/AWM-102 aircraft firing circuit test set with W2, W-3, 74D750020/W-12/W-47 and 74D750037/W49 Adapters
3. Proximity switch control test set
4. Weight-on-Wheels (WOW) wedge
5. AN/AWM-42/A Fuze function control test set
6. AN/ALM-225 Countermeasures dispenser test set
7. TALD Launch cable test adapter
8. TTU-504/E Launch adapter test plug
9. A/E-24T-230 Gun electrical circuit test set
10. Arming wire swivel loops or arming wire assemblies

AIRCRAFT PREPARATION

1. Aircraft grounded()
2. (If applicable) Electrical power removed()
3. M61 gun:
 - a. Gun electrical safety extended()
 - b. Manual clearing handle clear()
 - c. Gun interface connector disconnected and stowed()

WARNING

ENSURE CARTRIDGES ARE REMOVED FROM
ALL RACKS AND LAUNCHERS.

4. Cartridge retainers and caps removed; cartridges removed()
5. Ensure AN/ALE-39 dispensers are removed()
6. Cockpit/armament control switches/breakers:()
 - a. Cockpit (F/A-18A, fwd F/A-18B):
 - (1) MASTER - SAFE()
 - (2) EMERG JETT - off (inner guard ring not visible)()
 - (3) SELECT JETT - SAFE()
 - (4) JETT - off()
 - (5) RADAR - OFF()
 - (6) AUX REL - NORM()
 - (7) GND PWR 1, 2, 3, 4 - AUTO()
 - (8) EXT PWR - OFF()
 - (9) MC - NORM()
 - b. (F/A-18B) Aft cockpit:
 - (1) EMERG JETT - off (inner guard ring not visible)()

WARNING

TOT TEMP SENS PHTR, L AOA, L PITOT, R AOA,
AND R PITOT CIRCUIT BREAKERS MUST BE
OPEN (OUT) TO PREVENT HEATING OF TOTAL
TEMPERATURE PROBE.

- c. Circuit breaker panels:
 - (1) TOT TEMP SENS PHTR - Out()
 - (2) L AOA - Out()
 - (3) L PITOT - Out()
 - (4) R AOA - Out()
 - (5) R PITOT - Out()

AIRCRAFT PREPARATION (Continued)

7. All other switches - OFF, SAFE or NORMAL()
8. Weapon Insertion Panel codes - 0, 00 or STORE
installed code()
9. (All unloaded stations) Open suspension hooks()
10. Establish cockpit to ground communications()

NOTE: THE INDICATIONS OBTAINED FROM THE DDIs
ARE TYPICAL AND WILL VARY WITH
SOFTWARE CHANGES. THE END RESULT
SYSTEM GO/NO GO WILL BE AS INDICATED.

NOTE: DDI DISPLAYS ARE SELECTABLE AND MAY NOT
BE AS INDICATED IN THE SPECIFIC CHECK.

NOTE: PERFORM CHECK SECTIONS REQUIRED.

JETTISON SYSTEM

CHECK PREPARATION

1. Aircraft Preparation section completed()
2. ARMAMENT, FUZING codes:
 - a. ARMAMENT - 24 (stations to be checked)()
 - b. FUZING - 16 (stations to be checked)()
3. Close suspension hooks (stations to be checked)()

WARNING

DO NOT CONNECT PROXIMITY SWITCH
CONTROL TO AIRCRAFT WITH AIRCRAFT
LAUNCH BAR IN DOWN POSITION.

4. Connect Proximity Switch Control (nose wheelwell)()
5. Connect electrical power()
6. (If applicable) Apply cooling()

WARNING

PRIOR TO APPLYING POWER, COCKPIT
SWITCHES AND CONTROLS MUST BE READY
TO RECEIVE POWER.

7. GND PWR control panel:
 - a. EXT PWR - RESET then NORM()
 - b. Switches 1, 2, 3 - B ON()
8. Proceed to Table I()

NOTE:

ZERO RETENTION FORCE (ZRF) ARMING
UNITS NEED NOT BE CHECKED ON STATIONS
WITH STORES (FUEL TANKS, EMPTY MERS,
VERS, ETC.) INSTALLED.

JETTISON SYSTEM (Continued)

TABLE I			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
1	AWM-102 - ON.	Actuate right main gear WOW switch.	()
NOTE: GROUND SAFETY HANDLES WILL REMAIN UNLOCKED UNTIL RESET PROCEDURES ARE COMPLETED.			
2	Connect test set and adapter 74D750020/W-12/W-47 to forward breech (station being checked).		()
3	(AWM-54) FCTN - F/C; press and hold TEST. (AWM-102) Select FC.	Press and release EMERG JETT.	(AWM-54) GO. (AWM-102) FC displayed, then GO (station being checked); Ground safety handles - UNLOCKED and disconnected (stations being checked). ()
4	(AWM-54) Release TEST.		()

JETTISON SYSTEM (Continued)

TABLE I (Continued)				
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS	
5	(AWM-54) FCTN - S/V; press and release TEST. (AWM-102) Select, then deselect SV.		(AWM-54) GO. (AWM-102) SV displayed, then GO.	()
6	Transfer test set to aft breech (station being checked).			()
7	(AWM-54) Press and release TEST. (AWM-102) Select, then deselect SV.		(AWM-54) GO. (AWM-102) SV displayed, then GO.	()
8	(AWM-54) FCTN - F/C; press and hold TEST. (AWM-102) Select FC.	Press and release EMERG JETT.	(AWM-54) GO. (AWM-102) FC displayed, then GO.	()
9	(AWM-54) Release TEST.			()
10	(If applicable) Repeat steps 8 and 9 for aft cockpit, F-18B.			()
11	Repeat steps 2 thru 9 for each station to be checked.			()

JETTISON SYSTEM (Continued)

TABLE I (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
12		Remove WOW wedge from right main gear WOW switch.	()
13	(AWM-54) FCTN - S/V; press and hold TEST. (AWM-102) Select, then deselect SV.	Press and release EMERG JETT.	(AWM-54) GO. (AWM-102) SV displayed, then GO. ()
14	(AWM-54) Release TEST.		()
15	Transfer test set and 74D750020/W-12/W-47 adapter to fwd breech of next station to be checked. Repeat steps 13 thru 15 for each station to be checked.		()
16		EXT PWR - switch 3 - AUTO.	()
CAUTION: DO NOT PRESS DETENT BUTTON ON GROUND SAFETY HANDLES.			
NOTE: WHEN ROTATING GROUND SAFETY HANDLES TOWARD THE LOCKED POSITION, HANDLES WILL NOT GO COMPLETELY TO LOCKED.			

JETTISON SYSTEM (Continued)

TABLE I (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
17		Rotate ground safety handle toward LOCKED (all stations with hooks closed).	()
18		EXT PWR - switch 3 - B ON.	()
19		L and R DDIs - DAY. Install arming wires in ALL arming solenoids; latch ZRF arming units (stations to be checked).	Displays appear after warmup. ()
20		L DDI press MENU, then BIT.	L DDI SMS GO when BIT complete; ground safety handles drive to locked (all stations being checked). ()
21		R DDI press MENU, then STORES.	R DDI SAFE - on; acronym for weapon code in wingform (stations being checked). ()

JETTISON SYSTEM (Continued)

TABLE I (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
22	LEFT, RIGHT, NOSE GEAR - WT-OFF-WHEELS; GEAR UPLOCK - UP.	MASTER - ARM.	()
23	Connect test set and 74D750020/W-12/W-47 adapter to forward breech of first station to be check.	ARMAMENT OVERRIDE - OVERRIDE	R DDI SAFE - off; ARM - on. ()
24		R DDI press 82B.	R DDI 82B ; 1 82B in wingform. ()
25		R DDI select PROG 5.	()
26		R DDI press MFUZ, then N/T.	R DDI PROG List; PROG 5; MFUZ N/T. ()
27		Select A/G; SELECT JETT - RACK LCHR.	A/G - on; R DDI 82B ; RDY; 182 B (station being checked). Ground safety handles - UNLOCKED. ()

JETTISON SYSTEM (Continued)

TABLE I (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
28	(AWM-54) FCTN - F/C. (AWM-102) Select FC.	Select JETT STATION SELECT (station being checked).	Selected station light - on. (AWM-102) FC displayed. ()
WARNING: DO NOT PERFORM ZERO RETENTION FORCE (ZRF) ARMING UNIT CHECKS OR OPEN SUSPENSION HOOKS ON STATIONS WITH STORES (FUELED TANKS, EMPTY MERS, VERS, ETC.) INSTALLED.			
29	(AWM-54) Press and hold TEST.	Press and hold SELECT JETT - JETT; open bomb rack suspension hooks (station being checked.)	GO; ZRF arming units release; arming wires released (station being checked). ()
30	(AWM-54) Release TEST.	Release SELECT JETT - JETT.	()
31	(AWM-54) FCTN - S/V; press and release TEST. (AWM-102) Select, then deselect SV.		(AWM-54) GO. (AWM-102) SV displayed, then GO. ()

JETTISON SYSTEM (Continued)

TABLE I (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
32	Transfer test set to aft breech (station being checked).		()
33	(AWM-54) Press and release TEST. (AWM-102) Select, then deselect SV.		(AWM-54) GO. (AWM-102) SV displayed, then GO. ()
34	Transfer test set and 74D750020/W-12/W-47 adapter to forward breech of next station to be checked.		()
35	Repeat steps 28 thru 34 for each station to be checked.		()
36	Connect test set and 74D750037/W-49 adapter to aux breech (station being checked.)	Close all suspension hooks (station(s) being checked); deselect A/G.	A/G - off. ()

JETTISON SYSTEM (Continued)

TABLE I (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
37	GEAR UPLOCK - NORM; LEFT, RIGHT, NOSE GEAR - NORM.	Select, then deselect A/G.	A/G - on, then off. ()
38	LEFT, RIGHT, NOSE GEAR - WT-OFF-WHEELS; GEAR UPLOCK - UP.	Select A/G; press and release SELECT JETT - JETT.	A/G - on; H+ULK (all stations being checked). ()
39		AUX REL - ENABLE.	()
40	(AWM-54) FCTN - F/C; press and hold TEST. (AWM-102) Select FC.	Press and release SELECT JETT - JETT.	(AWM-54) GO. (AWM-102) FC displayed, then GO. ()
41	(AWM-54) Release TEST.		()
42	(AWM-54) FCTN - S/V; press and release TEST. (AWM-102) Select, then deselect SV.		(AWM-54) GO. (AWM-102) SV displayed, then GO. ()

JETTISON SYSTEM (Continued)

TABLE I (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
43	Transfer test set and 74D750037/W-49 adapter to aux breech of next station to be checked.		()
44	Repeat steps 40 thru 43 for remaining stations to be checked.		()
45		AUX REL - NORM.	()
46		Deselect JETT STATION SELECT, SELECT JETT - SAFE.	Station lights - off. ()
47		R DDI deselect 82B; MASTER - SAFE.	R DDI 82B; ARM - off; SAFE - on. ()
48		Deselect A/G.	A/G - off. ()
49	GEAR UPLOCK - NORM; LEFT, RIGHT, NOSE GEAR - NORM.		Ground safety handles - LOCKED (stations with hooks closed). ()

JETTISON SYSTEM (Continued)

TABLE I (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
50		L and R DDIs - OFF.	Displays - off. ()
51		EXT PWR - OFF.	()
52	AWM-102 - OFF; disconnect/remove test equipment.		()
53	Proceed to Postcheck if no other checks are to be performed.		()

PARENT RACK RELEASE SYSTEM

CHECK PREPARATION

1. Aircraft Preparation section completed()
2. ARMAMENT, FUZING codes:
 - a. ARMAMENT - 24 (stations to be checked)()
 - b. FUZING - 16 (stations to be checked)()
3. Close suspension hooks (stations to be checked)()

WARNING

DO NOT CONNECT PROXIMITY SWITCH
CONTROL TO AIRCRAFT WITH AIRCRAFT
LAUNCH BAR IN DOWN POSITION.

4. Connect Proximity Switch Control (nose wheelwell)()
5. Connect electrical power()
6. (If applicable) Apply cooling()

WARNING

PRIOR TO APPLYING POWER, COCKPIT
SWITCHES AND CONTROLS MUST BE READY
TO RECEIVE POWER.

7. GND PWR control panel:
 - a. EXT PWR - RESET then NORM()
 - b. Switches 1, 2, 3 - B ON()
8. Proceed to Table II()

PARENT RACK RELEASE SYSTEM (Continued)

TABLE II				
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS	
1		L and R DDIs - DAY.	Displays appear after warmup.	()
2		L DDI press MENU then BIT.	L DDI SMS GO when BIT complete.	()
3		Install arming wires in all arming units; latch ZRF arming units (stations to be checked).		()
4	LEFT, RIGHT, NOSE GEAR - WT-OFF-WHEELS; GEAR UPLOCK - UP.	Select A/G.	A/G - on; ground safety handles - UNLOCKED (stations being checked).	()
5		R DDI press MENU then STORES.	R DDI 1 82B in wingform (stations being checked); SAFE - on.	()

PARENT RACK RELEASE SYSTEM (Continued)

TABLE II (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
6		R DDI press 82B.	R DDI 82B ; 182B in wing-form (first station in firing sequence). ()
7		R DDI select PROG 5; press UFC.	()
8		On UFC press QTY, 1, ENT.	()
9		R DDI press MFUZ, then N/T.	R DDI PROG list: PROG 5 QTY 1 MFUZ N/T. ()
10		MASTER - ARM.	()
11	AWM-102 - ON.	ARMAMENT OVERRIDE - OVERRIDE.	R DDI SAFE - off; ARM - on; 82B RDY. ()

PARENT RACK RELEASE SYSTEM (Continued)

TABLE II (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
12	Connect test set and 74D750020/W-12/W-47 adapter to breech (station being checked). (AWM-54) FCTN - F/C; press and hold TEST. (AWM-102) Select FC.	Press and hold bomb button; open bomb rack suspension hooks (station being checked).	(AWM-54) GO. (AWM-102) FC displayed, then GO. ZRF arming units remain latched; arming wires retained. ()
13	(AWM-54) Release TEST.	Release bomb button.	R DDI 182B (next station). ()
14	(AWM-54) FCTN - S/V; press and release TEST. (AWM-102) Select, then deselect SV.		(AWM-54) GO. (AWM-102) SV displayed, then GO; arming wires released. ()
15	Disconnect/transfer test set and adapter 74D750020/W-12/W-47 to next station in firing sequence.		()
16	Repeat steps 12 thru 15 for each station to be checked.		()
17		R DDI deselect 82B; MASTER - SAFE.	R DDI 82B; ARM - off, SAFE - on. ()

PARENT RACK RELEASE SYSTEM (Continued)

TABLE II (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
18		Deselect A/G.	A/G - off. ()
19	GEAR UPLOCK - NORM; LEFT, RIGHT, NOSE GEAR - NORM.	L and R DDIs - OFF.	Displays - off. ()
20		EXT PWR - OFF.	()
21	AWM-102 - OFF; disconnect/remove test equipment.		()
22	Proceed to Postcheck if no other checks are to be performed.		()

VER RELEASE SYSTEM

CHECK PREPARATION

1. Aircraft Preparation section completed()
2. ARMAMENT, FUZING Codes:
 - a. ARMAMENT - 24 (stations to be checked)()
 - b. FUZING - 16 (stations to be checked)()
3. Close VER suspension hooks (stations to be checked)()

WARNING

DO NOT CONNECT PROXIMITY SWITCH
CONTROL TO AIRCRAFT WITH AIRCRAFT
LAUNCH BAR IN DOWN POSITION.

4. Connect Proximity Switch Control (nose wheelwell)()
5. Connect electrical power()
6. (If applicable) Apply cooling()

WARNING

PRIOR TO APPLYING POWER, COCKPIT
SWITCHES AND CONTROLS MUST BE READY
TO RECEIVE POWER.

7. GND PWR control panel:
 - a. EXT PWR - RESET then NORM()
 - b. Switches 1, 2, 3 - B ON()
8. Proceed to Table III()

VER RELEASE SYSTEM (Continued)

TABLE III			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
1		L and R DDIs - DAY.	Displays appear after warmup. ()
2		L DDI press MENU then BIT.	L DDI SMS GO when BIT complete. ()
3		Install arming wire in all arming solenoids; latch ZRF arming units (stations to be checked).	()
4	LEFT, RIGHT NOSE GEAR - WT-OFF-WHEELS; GEAR UPLOCK - UP.	Select A/G.	A/G - on; VER ground safety handles - UNLOCKED (stations being checked). ()
5		R DDI press MENU then STORES.	R DDI 2 ♦82B in wingform (stations being checked); SAFE - on. ()

VER RELEASE SYSTEM (Continued)

TABLE III (Continued)				
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS	
6		R DDI press 82B.	R DDI 82B ; 2 ♦ 82B in wingform (first station in firing sequence).	()
7		R DDI select PROG 5; press UFC.		()
8		On UFC press QTY, 1, ENT.		()
9		R DDI press MFUZ, then N/T.	R DDI PROG list: PROG 5 QTY 1 MFUZ N/T.	()
10		MASTER - ARM.		()
11	AWM-102 - ON.	ARMAMENT OVERRIDE - OVERRIDE.	R DDI SAFE - off; ARM - on; 82B RDY.	()

VER RELEASE SYSTEM (Continued)

TABLE III (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
12	Connect test set and 74D750020/W-12/W-47 adapter to fwd breech (station being checked).		()
13	(AWM-54) FCTN - F/C. (AWM-102) Select FC.		(AWM-102) FC displayed. ()
14	(AWM-54) Press and hold TEST.	Press and hold bomb button; open suspension hooks (BRU-33 rack being checked).	GO; ZRF arming units remain latched; arming wires retained (BRU-33 rack being checked). ()
15	(AWM-54) Release TEST.	Release bomb button.	R DDI 2 ♦ 82B (next station). ()

VER RELEASE SYSTEM (Continued)

TABLE III (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
16	(AWM-54) FCTN - S/V; press and release TEST. (AWM-102) Select, then deselect SV.		(AWM-54) GO. (AWM-102) SV displayed, then GO. ZRF arming units unlatch; (Arming solenoids) arming wires released when second bomb is released from VER. ()
17	Disconnect/transfer test set and 74D750020/W-12/W-47 adapter to next BRU-33 station to be checked. ()		
18	Repeat steps 13 thru 17 for remaining BRU-33 stations to be checked. ()		
19		Close suspension hooks on all BRU-33 racks; deselect A/G.	A/G - off. ()

VER RELEASE SYSTEM (Continued)

TABLE III (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
20	GEAR UPLOCK - NORM; LEFT, RIGHT, NOSE GEAR - NORM.	Install arming wires in nose and tail arming solenoids (stations being checked); latch ZRFs. Select then deselect A/G.	A/G - on, then off. ()
21	LEFT, RIGHT, NOSE GEAR - WT-OFF-WHEELS; GEAR UPLOCK - UP.	Select A/G.	A/G - on. ()
22		SELECT JETT - STORES.	()
23	Connect test set and 74D750020/W-12/W-47 adapter to aft breech (BRU-33 being checked).	Select JETT STATION SELECT (station being checked).	Selected station light - on. ()

VER RELEASE SYSTEM (Continued)

TABLE III (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
24	(AWM-54) FCTN - F/C; press and hold TEST. (AWM-102) Select FC.	Press and hold SELECT JETT - JETT; open suspension hooks (BRU-33 rack being checked.)	(AWM-54) GO. (AWM-102) FC displayed, then GO; ZRF arming units release; arming wires released. ()
25	(AWM-54) Release TEST.	Release SELECT JETT - JETT.	()
26	(AWM-54) FCTN - S/V; press and release TEST. (AWM-102) Select, then deselect SV.		(AWM-54) GO. (AWM-102) SV displayed, then GO. ()
27	Transfer test set to aft breach remaining BRU-33 rack (station being checked).		()
28	Repeat steps 24 thru 26.		()
29	Disconnect/transfer test set to aft breach of next BRU-33 to be checked.		()

VER RELEASE SYSTEM (Continued)

TABLE III (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
30	Repeat steps 23 thru 28 for remaining stations to be checked.		()
31		Deselect JETT STATION SELECT (all stations); SELECT JETT - SAFE.	Selected station lights - off. ()
32		R DDI deselect 82B; MASTER - SAFE; deselect A/G.	R DDI 82B; ARM - off; SAFE - on; A/G - off. ()
33	GEAR UPLOCK - NORM; LEFT, RIGHT, NOSE GEAR - NORM.	L and R DDIs - OFF.	Displays - off; ground safety handles - LOCKED (stations with hooks closed). ()
34	EXT PWR - OFF.		()
35	AWM-102 - OFF; disconnect/remove test equipment.		()
36	Proceed to Postcheck if no other checks are to be performed.		()

VER ROCKET FIRING SYSTEM

CHECK PREPARATION

1. Aircraft Preparation section completed()
2. ARMAMENT, FUZING codes:
 - a. ARMAMENT - 77 (stations to be checked)()
3. Close VER suspension hooks (stations to be checked)()

WARNING

DO NOT CONNECT PROXIMITY SWITCH
CONTROL TO AIRCRAFT WITH AIRCRAFT
LAUNCH BAR IN DOWN POSITION.

4. Connect Proximity Switch Control (nose wheelwell)()
5. Connect electrical power()
6. (If applicable) Apply cooling()

WARNING

PRIOR TO APPLYING POWER, COCKPIT
SWITCHES AND CONTROLS MUST BE READY
TO RECEIVE POWER.

7. GND PWR control panel:
 - a. EXT PWR - RESET then NORM()
 - b. Switches 1, 2, 3 - B ON()
8. Proceed to Table IV()

VER ROCKET FIRING SYSTEM (Continued)

TABLE IV			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
1		L and R DDIs - DAY.	Displays appear after warmup. ()
2		L DDI press MENU then BIT.	L DDI SMS GO when BIT complete. ()
3	LEFT, RIGHT, NOSE GEAR - WT-OFF-WHEELS; GEAR UPLOCK - UP.		()
4		Select A/G.	A/G - on. ()
5	AWM-102 - ON.	R DDI press MENU then STORES.	R DDI 8 ♦ 10R in wingform (stations being checked); SAFE - on. ()
6	Connect test set and W-2 adapter to rocket cable (first station in firing sequence).	R DDI press 10R, MAN, SGL.	R DDI MAN SGL 10R ; 8 ♦ 10R in wingform (first station in firing sequence). ()

VER ROCKET FIRING SYSTEM (Continued)

TABLE IV (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
7		MASTER - ARM.	()
8		ARMAMENT OVERRIDE - OVERRIDE.	R DDI SAFE - off; ARM - on; 10R RDY. ()
9	(AWM-54) FCTN - F/C; press and hold TEST. (AWM-102) Select FC.	Press and release bomb button.	(AWM-54) GO. (AWM-102) FC displayed, then GO. R DDI - ♦ 10R (next station in firing sequence). ()
10	(AWM-54) Release TEST.		()
11	(AWM-54) FCTN - S/V; press and release TEST. (AWM-102) Select, then deselect SV.		(AWM-54) GO. (AWM-102) SV displayed, then GO. ()
12	Transfer test set and W-2 adapter to next priority rocket cable and repeat steps 9 thru 11 for remaining stations to be checked.		()

VER ROCKET FIRING SYSTEM (Continued)

TABLE IV (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
13	Connect test set and 74D750020/W-12/W-47 adapter to BRU-33 forward breech (station being checked).		()
14		SELECT JETT - STORES.	Ground safety handles - UNLOCKED. ()
15		Select JETT STATION SELECT (station being checked).	Selected station light - on. ()
16	(AWM-54) FCTN - F/C; press and hold TEST. (AWM-102) Select FC.	Press and release SELECT JETT - JETT.	(AWM-54) GO. (AWM-102) FC displayed, then GO. R DDI H+ULK (station being checked). ()
17	(AWM-54) Release TEST.		()

VER ROCKET FIRING SYSTEM (Continued)

TABLE IV (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
18	(AWM-54) FCTN - S/V; press and release TEST. (AWM-102) Select, then deselect SV.		(AWM-54) GO. (AWM-102) SV displayed, then GO. ()
19	Transfer test set and 74D750020/W-12/W-47 adapter to remaining BRU-33 rack (station being checked).		()
20	Repeat steps 16 thru 18 for remaining BRU-33 rack (station being checked).		()
21	Transfer test set and 74D750020/W-12/W-47 adapter to BRU-33 forward breach (next station to be checked).		()
22	Repeat steps 15 thru 21 for each station to be checked.		()

VER ROCKET FIRING SYSTEM (Continued)

TABLE IV (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
23		Deselect JETT STATION SELECT (all selected stations); SELECT JETT - SAFE.	Selected station light(s) - off. ()
24		R DDI deselect 10R.	R DDI 10R. ()
25		MASTER - SAFE; deselect A/G.	R DDI ARM - off, SAFE - on; A/G - off. ()
26	GEAR UPLOCK - NORM; LEFT, RIGHT, NOSE GEAR - NORM.	L and R DDIs - OFF.	Displays - off; ground safety handles - LOCKED (stations with hooks closed). ()
27		EXT PWR - OFF.	()
28	AWM-102 - OFF; disconnect/remove test equipment.		()
29	Proceed to Postcheck if no other checks are to be performed.		()

MER/BRU-41/BRU-42 RELEASE SYSTEM

CHECK PREPARATION

1. Aircraft Preparation section completed()
2. Close all suspension hooks (MER/BRU-41/BRU-42 to
be checked)
()
3. ARMAMENT, FUZING codes:
 - a. ARMAMENT - 29 (stations to be checked)()

WARNING

DO NOT CONNECT PROXIMITY SWITCH
CONTROL TO AIRCRAFT WITH AIRCRAFT
LAUNCH BAR IN DOWN POSITION.

4. Connect Proximity Switch Control (nose wheelwell)()
5. Connect electrical power()
6. (If applicable) Apply cooling()

WARNING

PRIOR TO APPLYING POWER, COCKPIT
SWITCHES AND CONTROLS MUST BE READY
TO RECEIVE POWER.

7. GND PWR control panel:
 - a. EXT PWR - RESET then NORM()
 - b. Switches 1, 2, 3 - B ON()
8. Proceed to Table V()

MER/BRU-41/BRU-42 RELEASE SYSTEM (Continued)

TABLE V			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
1		L and R DDIs - DAY.	Displays appear after warmup. ()
2		L DDI press MENU then BIT.	L DDI SMS GO when BIT complete. ()
NOTE: IF LUU-2 FLARES ARE TO BE LOADED, PERFORM STEP 3. IF PRACTICE BOMBS ARE TO BE LOADED, PROCEED TO STEP 4.			
3		Install arming wires in tail arming solenoids; latch aft ZRF arming units; all MER/BRU-41 stations to be checked.	()
4	LEFT, RIGHT, NOSE GEAR - WT-OFF-WHEELS; GEAR UPLOCK - UP.		()
5		Select A/G.	A/G - on. ()

MER/BRU-41/BRU-42 RELEASE SYSTEM (Continued)

TABLE V (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
6		R DDI press MENU then STORES.	R DDI 3 ♦ 82XT (BRU-42) or 6 ♦ 82XT (MER/BRU-41) in wingform (station being checked); SAFE - on. ()
7		R DDI press 82XT.	R DDI 82XT ; 3 ♦ 82XT (BRU-42) or 6 ♦ 82XT (MER/BRU-41) in wingform (first station in firing sequence). ()
8		R DDI select PROG 5; press UFC.	()
9		On UFC press QTY, 1, ENT.	()
10		DDI press DRAG then RET.	R DDI PROG list; PROG 5 QTY 1 DRAG RET. ()
11		MASTER - ARM.	()

MER/BRU-41/BRU-42 RELEASE SYSTEM (Continued)

TABLE V (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
12		ARMAMENT OVERRIDE - OVERRIDE.	R DDI SAFE - off; ARM - on; [82XT] ; RDY. ()
13	AWM-102 - ON.	(MER) Home MER (station being checked); (if installed) remove safety pin.	MER HOMING - on. ()
14	Connect test set and W-3 adapter to station one of first MER/BRU-41/BRU-42 in firing sequence.		()
NOTE:	EACH TIME A RELEASE IS ACCOMPLISHED, THE NUMBER OF BOMBS LOADED WILL DECREASE BY ONE UNTIL ALL MER/BRU-41/BRU-42 STATIONS HAVE BEEN CHECKED.		
15	(AWM-54) FCTN - F/C; press and hold TEST. (AWM-102) Select FC.	Press and hold bomb button. Open hooks on MER/BRU- 41/BRU-42 station being checked.	(AWM-54) GO. (AWM-102) FC displayed, then GO. (If applicable) Arming wire retained; aft ZRF remains latched. ()

MER/BRU-41/BRU-42 RELEASE SYSTEM (Continued)

TABLE V (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
16	(AWM-54) Release TEST.	Release bomb button.	()
17		(If applicable) R DDI press STEP, reselect station being checked.	R DDI - ♦82XT . ()
NOTE: AFTER LAST RELEASE FOR STATION(S) BEING CHECKED, AN X WILL APPEAR THROUGH WEAPON SELECT 82XT, RDY WILL BE REMOVED AND STATION(S) WILL HAVE ♦82XT IN WINGFORM.			
18	Transfer test set to next MER/BRU-41/BRU-42 station in firing sequence.		()
19	Repeat steps 15 through 18 for each MER/BRU-41/BRU-42 station in sequence.		()
20	GEAR UPLOCK - NORM; LEFT, RIGHT NOSE GEAR - NORM.	Close MER/BRU-41 station 6 or BRU-42 station 3 suspension hooks.	()
21		Deselect A/G.	A/G - off. ()

MER/BRU-41/BRU-42 RELEASE SYSTEM (Continued)

TABLE V (Continued)				
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS	
22	LEFT, RIGHT, NOSE GEAR - WT-OFF-WHEELS; GEAR UPLOCK - UP.	Select A/G.	A/G - on; R DDI 3 ♦ 82XT (BRU-42) or 6 ♦ 82XT (MER/BRU-41) in wingform (station being checked).	()
23		SELECT JETT - STORES.		()
24		Select JETT STATION SELECT (station being checked).	Selected station light - on.	()
NOTE: BRU-41/BRU-42, PROCEED TO STEP 29.				
25	(AWM-54) FCTN - S/V. (AWM-102) Select SV.	(MER) Install safety pin.		()
26	(AWM-54) Press and hold TEST. (AWM-102) Deselect SV.	Press and release SELECT JETT - JETT.	GO.	()

MER/BRU-41/BRU-42 RELEASE SYSTEM (Continued)

TABLE V (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
27	(AWM-54) Release TEST.		()
28	(AWM-54) FCTN - F/C. (AWM-102) Select FC.	(MER) Remove electrical safety pin.	(AWM-102) FC displayed. ()
29	(AWM-54) Press and hold TEST.	Press and hold SELECT JETT - JETT; open suspension hooks MER/BRU-41 station 6 or BRU-42 station 3.	GO; (if applicable) arming wires released; aft ZRF arming units unlatch (all stations). ()
30	(AWM-54) Release TEST.	Release SELECT JETT.	()
31	(AWM-54) FCTN - S/V; press and release TEST. (AWM-102) Select, then deselect SV.		(AWM-54) GO. (AWM-102) SV displayed, then GO. ()
32		Deselect JETT STATION SELECT; SELECT JETT - SAFE.	Selected station light - off. ()

MER/BRU-41/BRU-42 RELEASE SYSTEM (Continued)

TABLE V (Continued)				
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS	
33	(If applicable) Transfer test set to MER/BRU-41/BRU-42 station 1 (next aircraft station in firing sequence).			()
34		(If applicable) Install arming wires in tail arming solenoids; latch aft ZRF arming units all MER/BRU-41/BRU-42 stations to be checked.		()
35	(If applicable) Repeat steps 13 thru 34 for each aircraft station to be checked.			()
36		R DDI deselect 82XT; MASTER - SAFE.	R DDI 82XT; ARM - off; SAFE - on.	()
37		Deselect A/G.	A/G - off.	()

MER/BRU-41/BRU-42 RELEASE SYSTEM (Continued)

TABLE V (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
38	GEAR UPLOCK - NORM; LEFT, RIGHT, NOSE GEAR - NORM.		()
39		L and R DDIs - OFF.	Displays - off. ()
40	EXT PWR - OFF.		()
41	AWM-102 OFF; disconnect/remove test equipment.		()
42		Close all MER/BRU-41/BRU-42 suspension hooks.	()
43	Proceed to Postcheck if no other checks are to be performed.		()

BRU-42 TALD RELEASE SYSTEM

CHECK PREPARATION

1. Aircraft Preparation section completed()
2. ARMAMENT, FUZING codes:
 - a. ARMAMENT - 25 (stations to be checked)()

WARNING

DO NOT CONNECT PROXIMITY SWITCH
CONTROL TO AIRCRAFT WITH AIRCRAFT
LAUNCH BAR IN DOWN POSITION.

3. Connect Proximity Switch Control (nose wheelwell)()
4. BRU-42:
 - a. Close suspension hooks (stations to be checked)()
 - b. Install TALD launch cable (stations to be checked)()
5. Connect electrical power()
6. (If applicable) Apply cooling()

WARNING

PRIOR TO APPLYING POWER, COCKPIT
SWITCHES AND CONTROLS MUST BE READY
TO RECEIVE POWER.

7. GND PWR control panel:
 - a. EXT PWR - RESET then NORM()
 - b. Switches 1, 2, 3 - B ON()
8. Proceed to Table VI()

BRU-42 TALD RELEASE SYSTEM (Continued)

TABLE VI			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
1		L and R DDIs - DAY.	Displays appear after warmup. ()
2		L DDI press MENU, then BIT.	L DDI SMS GO when BIT complete. ()
NOTE: IF ITALD ARE TO BE LOADED, PERFORM STEP 3. OTHERWISE, PROCEED TO STEP 4.			
3		Latch ZRF arming units (all BRU-42 stations to be checked).	()
4	LEFT, RIGHT, NOSE GEAR - WT-OFF-WHEELS; GEAR UPLOCK - UP.		()
5		Select A/G.	A/G - on. ()

BRU-42 TALD RELEASE SYSTEM (Continued)

TABLE VI (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
6		R DDI press MENU, then STORES.	R DDI 3 ♦ 82P in wingform (stations being checked). ()
7		R DDI press 82P.	R DDI 82P ; 3 ♦ 82P in wingform (first station in firing sequence). ()
8		R DDI select PROG 5; press UFC.	()
9		On UFC press QTY, 1, ENT.	R DDI PROG list: PROG 5 QTY 1. ()
10		MASTER - ARM.	()
11	AWM-102 - ON.	ARMAMENT OVERRIDE - OVERRIDE.	R DDI SAFE - OFF; ARM - on; 82P; RDY. ()

BRU-42 TALD RELEASE SYSTEM (Continued)

TABLE VI (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
12	Connect test set W-3 and TTU-504/E to station one of first BRU-42 in firing sequence.		()
NOTE:		QUANTITY INDICATED IN WINGFORM WILL DECREASE BY ONE EACH TIME THE BOMB BUTTON IS PRESSED AND THE BRU-42 RACK SUSPENSION HOOKS ARE OPENED.	
13	(AWM-54) FCTN - F/C; press and hold TEST. (AWM-102) Select FC.	Press and hold bomb button.	(AWM-54) GO. (AWM-102) FC displayed, then GO. ()
14	(AWM-54) Release TEST.	Open front hooks on BRU-42 station being checked.	()
15		Release bomb button.	()
16		(If applicable) R DDI press STEP, reselect station being checked.	R DDI 2 ♦ 82P in wingform. ()

BRU-42 TALD RELEASE SYSTEM (Continued)

TABLE VI (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
17	Transfer test set and test adapters to next BRU-42 station in firing sequence.		()
NOTE: AFTER LAST RELEASE FOR STATION(S) BEING CHECKED, AN X WILL APPEAR THROUGH WEAPON SELECT 82P, RDY WILL BE REMOVED AND STATION(S) WILL HAVE ♦82P IN WINGFORM.			
18	Repeat steps 13 thru 17 for each BRU-42 station in sequence.		()
NOTE: LEAVE TEST SET CONNECTED TO LAST BRU-42 STATION CHECKED.			
19		Close hooks on station 3 (BRU-42 being checked).	()
20	GEAR UPLOCK - NORM; LEFT, RIGHT NOSE GEAR - NORM.	Deselect A/G.	A/G - off; R DDI 3 ♦82P in wing form. ()

BRU-42 TALD RELEASE SYSTEM (Continued)

TABLE VI (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
21		Select A/G.	A/G - on; R DD 3 ♦ 82P ; RDY - on; in wingform (station being checked). ()
22	LEFT, RIGHT, NOSE GEAR - WT-OFF-WHEELS; GEAR UPLOCK - UP.	SELECT JETT - STORES.	()
23		Select JETT STATION SELECT (station being checked).	Selected station light - on. ()
24	(AWM-54) Press and hold TEST. (AWM-102) Select FC.	Press and release SELECT JETT - JETT.	(AWM-54) GO. (AWM-102) FC displayed, then GO. ()
25	(AWM-54) Release TEST.		()

BRU-42 TALD RELEASE SYSTEM (Continued)

TABLE VI (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
26	(AWM-54) FCTN - S/V; press and release TEST. (AWM-102) Select then deselect SV.		(AWM-54) GO. (AWM-102) SV displayed, then GO. ()
27		Deselect JETT STATION SELECT; SELECT JETT - SAFE.	Selected station light - off. ()
NOTE: IF NO OTHER STATIONS TO BE CHECKED, PROCEED TO STEP 31.			
28	Transfer test set and test adapter to BRU-42 station 1 (next aircraft station in firing sequence).		()
29		(If applicable) Latch ZRF arming units (all BRU-42 stations to be checked).	()

BRU-42 TALD RELEASE SYSTEM (Continued)

TABLE VI (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
30	Repeat steps 13 thru 29 for each aircraft station to be checked.		()
31		R DDI deselect 82P.	R DDI 82P; RDY - off. ()
32		MASTER - SAFE. Deselect A/G.	R DDI ARM - off; SAFE - on; A/G - off. ()
33	GEAR UPLOCK - NORM; LEFT, RIGHT, NOSE GEAR - NORM.		Ground safety handles - LOCKED (station being checked). ()
34		L and R DDIs - OFF.	Displays - off. ()
35		EXT PWR - OFF.	()
36	AWM-102 OFF; disconnect/remove test equipment.		()
37	Proceed to Postcheck if no other checks are to be performed.		()

FUZE FUNCTION CONTROL SYSTEM

CHECK PREPARATION

NOTE: ONLY THE CONTINUITY PORTION OF THE FUZE FUNCTION CONTROL SYSTEM CHECK IS REQUIRED PRIOR TO LOADING. THE CONTINUITY CHECK MUST BE PERFORMED ON ALL PARENT BOMB RACKS WITHOUT STORES (TANKS, VERS, MERS, ETC) INSTALLED AND ALL VER STATIONS.

1. Aircraft Preparation section completed()
2. ARMAMENT, FUZING codes:
 - a. ARMAMENT - 25 (stations to be checked)()
 - b. FUZING - 31 (stations to be checked)()
3. Close suspension hooks (stations to be checked)()

WARNING

DO NOT CONNECT PROXIMITY SWITCH CONTROL TO AIRCRAFT WITH AIRCRAFT LAUNCH BAR IN DOWN POSITION.

4. Connect Proximity Switch Control (nose wheelwell)()
5. Connect electrical power()
6. (If applicable) Apply cooling()
7. Proceed to Table VII()

FUZE FUNCTION CONTROL SYSTEM (Continued)

TABLE VII			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
1	Connect test set (first station to be checked).		()
2	FUNCTION SWITCH - OHMS.		()
3	OHMS, OFF, CAL - CAL and hold; adjust CAL ADJ.		METER - center green. ()
4	OHMS, OFF, CAL - OFF.		()
5	OHMS, OFF, CAL - OHMS and hold.		METER - infinity. ()
6		Open suspension hooks (station being checked).	METER - green. ()
7	OHMS, OFF, CAL - OFF.		()

FUZE FUNCTION CONTROL SYSTEM (Continued)

TABLE VII (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
8	Disconnect/transfer test set to next station to be checked.		()
9	Repeat steps 5 thru 8 for each station to be checked.		()
NOTE:	IF HIGH VOLTAGE CHECK IS TO BE PERFORMED, PROCEED TO STEP 11.		
10	Proceed to Postcheck if no other checks are to be performed.		()
11	Connect test set to any wing pylon ELECTRIC FUZING connector 61J-W102.		()
12	Close suspension hooks (all stations being checked).		()
WARNING: PRIOR TO APPLYING POWER, COCKPIT SWITCHES AND CONTROLS MUST BE READY TO RECEIVE POWER.			

FUZE FUNCTION CONTROL SYSTEM (Continued)

TABLE VII (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
13		EXT PWR - RESET; then NORM; switches 1, 2, 3, - B ON.	()
14		L and R DDIs - DAY.	Displays appear after warmup. ()
15		L DDI press MENU, then BIT.	L DDI SMS GO when BIT complete. ()
16	LEFT, RIGHT, NOSE GEAR - WT-OFF-WHEELS; GEAR UPLOCK - UP.		()
17		Select A/G.	A/G - on; ground safety handles - UNLOCKED (stations being checked). ()
18		R DDI press MENU, then STORES.	R DDI 82P in wingform; SAFE - on. ()

FUZE FUNCTION CONTROL SYSTEM (Continued)

TABLE VII (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
19		R DDI press 82P.	R DDI 82P . ()
20		R DDI select PROG 5; press UFC.	()
21		On UFC press QTY, 1, ENT.	()
22		R DDI press EFUZ, then VT.	R DDI PROG list: PROG 5 QTY 1 EFUZ VT. ()
23		MASTER - ARM.	()
24	FUNCTION SWITCH - VT +300.	ARMAMENT OVERRIDE - OVERRIDE.	R DDI SAFE - off; ARM - on; <u>82P</u> ; RDY - on; <u>82P</u> in wingform. ()

FUZE FUNCTION CONTROL SYSTEM (Continued)

TABLE VII (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
WARNING: HIGH VOLTAGE IS PRESENT DURING ALL VOLTAGE CHECKS.			
NOTE: TO OBTAIN CORRECT INDICATION, BOMB BUTTON MUST BE PRESSED AND HELD UNTIL TEST SET METER INDICATION IS CONFIRMED, THEN RELEASED.			
25		Press and release bomb button.	METER - green while bomb button pressed. ()
NOTE: IF LESS THAN 4 STATIONS ARE BEING CHECKED, PERFORM RESET PROCEDURES (STEPS 26 THRU 29) WHEN H+ULK IS DISPLAYED IN WINGFORM FOR ALL STATIONS BEING CHECKED.			
26		Deselect A/G.	A/G - off. ()
27	GEAR UPLOCK - NORM; LEFT, RIGHT, NOSE GEAR - NORM.	Select, then deselect A/G.	A/G - on, then off. ()

FUZE FUNCTION CONTROL SYSTEM (Continued)

TABLE VII (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
28	LEFT, RIGHT, NOSE GEAR - WT-OFF-WHEELS; GEAR UPLOCK - UP.	Select A/G.	A/G - on; R DDI [82P]; RDY - on; [82P] in wingform. ()
29	Proceed to next step in test sequence to be performed.		()
30	FUNCTION SWITCH - INST +195.	R DDI press EFUZ, then INST.	()
31		Press and release bomb button.	METER - green while bomb button pressed. ()
32	FUNCTION SWITCH - DLY 1 -195.	R DDI press EFUZ, then DLY 1.	()
33		Press and release bomb button.	METER - green while bomb button pressed. ()

FUZE FUNCTION CONTROL SYSTEM (Continued)

TABLE VII (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
34	FUNCTION SWITCH - DLY 2 -300.	R DDI press EFUZ, then DLY 2.	()
35		Press and release bomb button.	METER - green while bomb button pressed. ()
36		R DDI deselect 82P; MASTER - SAFE; deselect A/G.	R DDI 82P; RDY - off; ARM - off, SAFE - on; A/G - off. ()
37	GEAR UPLOCK - NORM; LEFT, RIGHT, NOSE GEAR - NORM.	L and R DDIs - OFF.	Displays - off. ()
38		EXT PWR - OFF.	()
39	Disconnect/remove test equipment.		()
40	Proceed to Postcheck if no other checks are to be performed.		()

M61 GUN FIRING

CHECK PREPARATION

1. Aircraft Preparation section completed()

CAUTION

DO NOT ROTATE GUN SYSTEM WITH ANTI-JAM
PIN PULLED AND LOCKED.

2. Anti-jam pin - disengaged (NOT pulled and locked)()

WARNING

DO NOT ROTATE GUN SYSTEM BY HAND OR
POWER PACK IF AIRCRAFT HYDRAULIC
SYSTEM IS PRESSUREIZED.

3. Pull hydraulic manual control()

WARNING

DO NOT ROTATE GUN SYSTEM WITHOUT
ENSURING MANUAL CLEARING HANDLE IS IN
CLEAR POSITION.

CAUTION

DO NOT ROTATE HANDCRANK COUNTER-
CLOCKWISE.

4. Twelve chambers clear of ammunition()
5. Pull and lock anti-jam pin()
6. (If applicable) Connection gun test set to gun interface
connector()
7. (If applicable) Push reset on Encoder/Decoder to obtain
FULL indication()
8. Connect electrical power()
9. (If applicable) Apply cooling()

WARNING

PRIOR TO APPLYING POWER, COCKPIT
SWITCHES AND CONTROLS MUST BE READY
TO RECEIVE POWER.

M61 GUN FIRING (Continued)

10. GND PWR control panel:
 - a. EXT PWR - RESET then NORM()
 - b. Switches 1, 2, 3 - B ON()
8. Proceed to Table VIII for multimeter or Table IX for
gun test set()

M61 GUN FIRING (Continued)

TABLE VIII			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
1		L and R DDIs - DAY.	Displays appear after warmup. ()
2		L DDI press MENU then BIT.	L DDI SMS GO when BIT complete. ()
3		Select A/G.	A/G - on. ()
4		L DDI press MENU then STORES.	L DDI 578 appears in wingform for GUN; SAFE - on. ()
5		L DDI press GUN, MAN, LO.	L DDI GUN MAN LO. ()
6		MASTER - ARM.	()
7		ARMAMENT OVERRIDE - OVERRIDE.	L DDI SAFE - off; ARM - on; <u>GUN</u> ; RDY - on. ()

M61 GUN FIRING (Continued)

TABLE VIII (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
8	Connect leads to gun interface connector pin Y (-) and pin N (+).		()
WARNING: HIGH VOLTAGE IS PRESENT AT GUN INTERFACE CONNECTOR FOR REMAINDER OF CHECK.			
NOTE: MULTIMETER WILL BE SET TO READ REQUIRED VOLTAGES.			
9		Press and hold trigger.	0 vdc. ()
10		Push gun electrical safety switch in, turn clockwise and release.	240 - 290 vdc. ()
11		Release trigger.	Voltage remains momentarily, then 0 vdc. ()
12	Connect leads to gun interface connector pin T (-) and pin A (+).	Press and hold trigger.	21 - 28.5 vdc. ()
13		Release trigger.	0 vdc. ()

M61 GUN FIRING (Continued)

TABLE VIII (Continued)				
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS	
14		On stick grip, select gun; on L DDI, select A GUN.	A/G - off; A/A - on; L DDI MAN - off; GUN - off; LO; HI ; A GUN - on.	()
15		Press and hold trigger.	21 - 28.5 vdc.	()
16		Release trigger.	0 vdc.	()
17	Connect leads to gun interface connector pin Y (-) and pin N (+).	Press and hold trigger.	240 - 290 vdc.	()
18		Release trigger.	Voltage remains momentarily, then 0 vdc.	()
19	Disconnect/remove test equipment.	Extend gun electrical safety switch.		()
20		MASTER - SAFE.	ARM - off; SAFE - on.	()

M61 GUN FIRING (Continued)

TABLE VIII (Continued)				
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS	
21		Deselect A/A.	A/A - off; L DDI A GUN - off, GUN .	()
22		L DDI deselect GUN.	L DDI GUN.	()
23		L and R DDIs - OFF.	Displays - off.	()
24		EXT PWR - OFF.		()
25	Proceed to Postcheck if no other checks are to be performed.			()

M61 GUN FIRING (Continued)

TABLE IX			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
1		L and R DDIs - DAY.	Displays appear after warmup. ()
2		L DDI press MENU, then BIT.	L DDI SMS GO when BIT complete. ()
3		Select A/G.	A/G - on; all test set lights - off. ()
4		L DDI press MENU then STORES.	L DDI 578 appears in wingform for gun; SAFE - on. ()
5		L DDI press GUN, MAN, LO.	L DDI GUN ; <u>MAN</u> ; <u>LO</u> . ()
6		MASTER - ARM.	()
7		ARMAMENT OVERRIDE - OVERRIDE.	L DDI SAFE - off; ARM - on; <u>GUN</u> ; RDY - on. ()

M61 GUN FIRING (Continued)

TABLE IX (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
8		Press and hold trigger.	Test set 28 V - on; 0 V (300 V) - on. ()
9	Press and release LAMP TEST.		Test set 0 V (28 V) and 300 V - on, then off. ()
10		Release trigger.	All test set lights - off. ()
WARNING: THE TEST SET 0 VOLTS (28 VOLTS) (RED) LIGHT MUST REMAIN OFF FOR THE REMAINDER OF THE CHECK OR STRAY VOLTAGE IS PRESENT.			
11		Push gun electrical safety switch in, turn clockwise and release.	()
12		Press and hold trigger.	Test set 28 V and 300 V - on. ()
13		Release trigger.	All test set lights - off. ()

M61 GUN FIRING (Continued)

TABLE IX (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
14		On stick grip, select gun; on L DDI, select A GUN.	A/G - off; A/A - on; L DDI MAN - off; GUN - off; LO; HI ; A GUN - on. ()
15		Press and hold trigger.	Test set 28 V and 300 V - on. ()
16		Release trigger.	All test set lights - off. ()
17		Extend gun electrical safety switch.	()
18		Press and hold trigger.	Test set 28 V and 0 V (300 V) - on. ()
19		Release trigger.	All test set lights - off. ()
20		Deselect A/A; MASTER - SAFE.	A/A - off; L DDI ARM - off; SAFE - on; GUN . ()

M61 GUN FIRING (Continued)

TABLE IX (Continued)				
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS	
21		L DDI deselect GUN.	L DDI GUN.	()
22		L and R DDIs - OFF.	Displays - off.	()
23		EXT PWR - OFF.		()
24	Disconnect/remove test equipment.			()
25	Proceed to Postcheck if no other checks are to be performed.			()

ALE-39 DISPENSER SYSTEM

CHECK PREPARATION

1. Aircraft Preparation section completed()
2. (ALM-225):
 - a. Calibrate meter()
 - b. SELECT - END TO END()
 - c. Install test set in LH dispenser housing()

WARNING

DO NOT CONNECT PROXIMITY SWITCH
CONTROL TO AIRCRAFT WITH AIRCRAFT
LAUNCH BAR IN DOWN POSITION.

3. Connect Proximity Switch Control (nose wheelwell)()
4. ALE-39 Programmer:
 - a. CHAFF B QTY - 4()
 - b. CHAFF B INTV - .5()
 - c. CHAFF S QTY - 2()
 - d. CHAFF S INTV - 2()
 - e. FLARE QTY - 10()
 - f. FLARE INTV - 2()
 - g. JAMMER QTY - 4()
 - h. JAMMER INTV - 001()
 - i. LOAD L10 - C()
 - j. LOAD L20 - F()
 - k. LOAD R10 - J()
 - l. LOAD R20 - F()
5. ECM counters:
 - a. CHAFF - 10()
 - b. FLARE - 40()
 - c. JAMMER - 10()
6. Connect electrical power()
7. (If applicable) Apply cooling()

ALE-39 DISPENSER SYSTEM (Continued)

WARNING

PRIOR TO APPLYING POWER, COCKPIT
SWITCHES AND CONTROLS MUST BE READY
TO RECEIVE POWER.

- 8. GND PWR control panel:
 - a. EXT PWR - RESET then NORM()
 - b. Switch 3 - A ON()
- 9. Proceed to Table X()

ALE-39 DISPENSER SYSTEM (Continued)

TABLE X			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
1	RIGHT, NOSE GEAR - WT-OFF-WHEELS.	MASTER - ARM.	()
2		ARMAMENT OVERRIDE - OVERRIDE.	()
3		DISPENSER - C.	()
4		RESET - RESET for 5 seconds, then release.	()
5		Push throttle grip chaff/flare switch forward and release.	Test set light 1 flashes; CHAFF counter - 9. ()
6		MODE SEL - PRGM; press and release DISP.	Test set lights 2 - 5, then 6 - 9 flash; CHAFF counter - 1. ()
7		MODE SEL - SNGL.	()

ALE-39 DISPENSER SYSTEM (Continued)

TABLE X (Continued)				
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS	
8		Press and release canopy ledge DISP.	Test set light 10 flashes; CHAFF counter - 00.	()
9		MODE SEL- PRGM; DISPENSER - F/M.		()
10		Press and release canopy ledge DISP.	Test set lights 11 - 20 flash; FLARE counter - 20.	()
11		MODE SEL- SNGL; press and release DISP.	Test set light 21 flashes; FLARE counter - 18.	()
12		Push throttle grip chaff/flare switch aft and release.	Test set light 22 flashes; FLARE counter - 16.	()
13		DISPENSER - F/S; press and release DISP.	Test set light 23 flashes; FLARE counter - 15.	()
14	RIGHT, NOSE GEAR - NORM.	Press and release DISP 2 times.	No test set lights flash; FLARE counter remains - 15.	()

ALE-39 DISPENSER SYSTEM (Continued)

TABLE X (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
15	RIGHT, NOSE GEAR - WEIGHT-OFF-WHEELS.	MASTER - SAFE.	()
16		Press and release DISP 2 times.	No test set lights flash; FLARE counter remains - 15. ()
17		MASTER - ARM; ARMAMENT OVERRIDE - OVERRIDE.	()
18		DISPENSER - SF PULL.	Remaining test set lights flash; FLARE counter - 00. ()
19		DISPENSER - J. RESET - RESET for 5 seconds then release.	()
20	SELECT - SAFE ENERGY; press and release PUSH TO TEST.		Test set meter - green while pressed. ()

ALE-39 DISPENSER SYSTEM (Continued)

TABLE X (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
21	Transfer ALM-225 test set to RH dispenser housing; SELECT END TO END.		()
22		MODE SEL- PRGM; press and release DISP.	Test set lights 1 - 4 flash; JAMMER counter - 6. ()
23		MODE SEL- SNGL; press and release DISP six times.	Test set lights 5 thru 10 flashes; JAMMER counter - 0. ()
24		DISPENSER - SF PULL.	Test set lights 11 - 30 flash. ()
25		DISPENSER - C.	()
26		RESET - RESET for 5 seconds then release.	()

ALE-39 DISPENSER SYSTEM (Continued)

TABLE X (Continued)			
STEP	TEST SET SWITCHES	AIRCRAFT SWITCHES	INDICATIONS
27	SELECT - SAFE ENERGY; press and release PUSH TO TEST.		Test set meter - green while pressed. ()
28		DISPENSER - OFF; MODE SEL - STBY; MASTER - SAFE.	 ()
29	RIGHT , NOSE GEAR - NORM.	EXT PWR - OFF.	 ()
30	Disconnect/remove test equipment.		 ()
31	Proceed to Postcheck if no other checks are to be performed.		 ()

POSTCHECK

1. Aircraft grounded()
2. (If applicable) Electrical power removed()
3. (If applicable) Remove cooling air()
4. Gun interface connector disconnected and stowed()
5. Cockpit/armament control switches:
 - a. Cockpit (F/A-18A, fwd F/A-18B):
 - (1) MASTER - SAFE()
 - (2) EMERG JETT - off (inner guard ring not visible)()
 - (3) SELECT JETT - SAFE()
 - (4) JETT - off()
 - (5) RADAR - OFF()
 - (6) AUX REL - NORM()
 - (7) GND PWR 1, 2, 3, 4 - AUTO()
 - (8) EXT PWR - OFF()
 - (9) MC - NORM()
 - b. (F/A-18B) Aft cockpit:
 - (1) EMERG JETT - off (inner guard ring not visible)()
6. All other switches - OFF, SAFE or NORMAL()
7. ARMAMENT OVERRIDE - off (down)()
8. Weapons insertion panel codes - 0, 00 or STORE installed
code()
9. (All unloaded stations) Open suspension hooks()
10. (If applicable) Reinstall ALE-39 dispensers()
11. Disconnect/remove all tools and test equipment from aircraft
and area()
12. Install/close all access doors and panels()
13. Report status to proper authority()

